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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,350	08/26/2003	Yung-Cheng Lee	BHT-3111-355	3495

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BRUCE H. TROXELL
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

SANDOVAL, KRISTIN D

ART UNIT	PAPER NUMBER
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2132

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/647,350

Applicant(s)

LEE ET AL.

Examiner

Kristin D. Sandoval

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-14 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12 and 14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "the single-chip timing-interrupt method" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites, "an operating method for the device." Claim 14 depends from independent claim 13 and independent claim 13 is drawn to a device, therefore, it is unclear whether the claims should be drawn to a device or a claim but it cannot be both.

Claim 14 recites the limitation "said compelling synchronized mode" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "said identity of said timer" in line 6. There is insufficient antecedent basis for this limitation in the claim. The previous identity is not an identity associated with the timer.

Claim Rejections - 35 USC § 102

Art Unit: 2132

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 4 and 8-13 rejected under 35 U.S.C. 102(b) as being anticipated by

Waggamon et al. (Waggamon), U.S. Patent No. 6,049,289.

As per claims 1, 3, 4, 8, 9 and 13:

Waggamon discloses an encoding device comprising:

A timer used to provide a transmitting time (4:43-54);

a mode selector used to provide a mode select value (5:22-29);

a controller, by which an identity, said transmitting time, and said mode select value are received to generate a control signal in plaintext (4:43-5:8);

a 64 bit symmetric key stored in a non-volatile memory and an encryptor, which receives said control signal and applies said key to encrypt said control signal to a ciphertext (5:9-34); and

a RF modulator, which modulates and outputs said ciphertext (4:13-30).

As per claim 10:

Waggamon discloses a device wherein an initial value of the timer is a random number (4:53-54, 5:1-8).

As per claim 11 and 12:

Waggamon discloses a device wherein the timer is realized by a logic circuit on a single chip (4:13-31).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 5 and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Waggamon as applied to claims 1 and 13 above, and further in view of Kawaguchi, U.S. PG-PUB 2002/0099967.

As per claims 2 and 5:

Waggamon fails to teach a 32 bit timer. However, Kawaguchi discloses a 32 bits timer resulting in a 32 bit time (paragraph 0093).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to utilize a 32 bits timer as opposed to a 16 bits counter because this would allow larger numbers to be used.

As per claim 7:

Waggamon fails to teach a 2 byte identity value. However, Kawaguchi discloses a 2 byte Specifier and node ID (paragraphs 0070 and 0090).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to utilize a 2 byte identity value as opposed to the 24 bit identity value in Waggamon in order to decrease the amount of bits dedicated to the identity value.

As per claim 14:

Art Unit: 2132

Waggamon substantially teaches activating an encoding device and a timer and encrypting the transmitting time and identity and the mode value (5:9-49). Waggamon fails to teach checking whether the decoding device has been activated during a set time period and if it isn't then to stop timing and if it is then sending an encrypted signal with no mode value. However, Kawaguchi discloses checking a state on a decoder and suspending the timer if the state is idle and sending a transmission if the state is active (paragraph 0093):

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to check if the decoder is activated in order to avoid wasting time sending signals to a decoder that is not activated.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bruwer, U.S. Patent No. 5,686,904 and Bruwer, U.S. Patent No. 6,175,312 – Both teach a control signal generated by an ID, mode select value and a transmit time which is then encrypted with a key.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristin D. Sandoval whose telephone number is 571-272-7958. The examiner can normally be reached on Monday - Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2132

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KDS
KDS

Kristin D Sandoval
Examiner
Art Unit 2132

Benjamin E. Lerner
Examiner Art Unit 2132